DOCKET NO: 0039-7484-2SRD



& TRADEMARK OFFICE IN THE UNITED STATES PATENT

IN RE APPLICATION OF

: EXAMINER: ZIA, SYED

SERIAL NO: 09/472,068

OSAMU HORI, ET AL.

2ND RCE FILED: JULY 30, 2004

: GROUP ART UNIT: 2131

FOR: INFORMATION PROVIDING METHOD AND APPARATUS, AND INFORMATION RECEPTION

APPARATUS

RESPONSE

COMMISSIONER FOR PATENTS ALEXANDRIA, VIRGINIA 22313

SIR:

In response to the Communication of February 7, 2006, the attached amended Appeal Brief is submitted.

In the Communication of February 7, 2006, the Appeal Brief filed November 17, 2005 was noted as defective as not containing a concise explanation of dependent claims 2, 4, 8, 15-16, and 18 as they were argued separately.

In response to that position the enclosed amended Appeal Brief is submitted, which is similar to the previously provided Appeal Brief but which includes an additional disclosure in the "Summary of Claimed Subject Matter" Section V clarifying where the features in claims 2, 4, 8, 15-16, and 18 are noted in the specification.

Application No. 09/472,068 Reply to Communication of February 7, 2006

In view of the presently submitted amended Appeal Brief all issues raised in the Communication of February 7, 2006 are believed to be addressed.

A proper response to the filed amended Appeal Brief is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.

Customer Number

22850

Tel: (703) 413-3000 Fax: (703) 413 -2220 (OSMMN 06/04)

EHK:SNS\la

I:\ATTY\SNS\0039\00397484\00397484-RESPONSE1.DOC

Eckhard H. Kuesters Attorney of Record Registration No. 28,870 Surinder Sachar

Registration No. 34,423

DOCKET NO: 0039-7484-2SRD



IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF

•

OSAMU HORI, ET AL.

: EXAMINER: ZIA, SYED

SERIAL NO: 09/472,068

.

2ND RCE FILED: JULY 30, 2004

: GROUP ART UNIT: 2131

FOR: INFORMATION PROVIDING METHOD AND APPARATUS, AND INFORMATION RECEPTION

APPARATUS

APPEAL BRIEF

COMMISSIONER FOR PATENTS ALEXANDRIA, VIRGINIA 22313

SIR:

Applicants appeal the outstanding Final rejection of May 4, 2005.

I. REAL PARTY IN INTEREST

The real party in interest in the present appeal is Kabushiki Kaisha Toshiba, the Assignee of the present application, having a place of business at 72 Horikawa-cho, Saiwai-ku, Kawasaki-shi, Japan.

II. RELATED APPEALS AND INTERFERENCES

Appellant's legal representative, and the Assignee are not aware of any related prior and pending appeals, interferences, or judicial proceedings that may be related to, directly affect or be directly affected by, or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1-25 are pending in this application. Each of claims 1-25 is rejected and the rejection of each of claims 1-25 is being appealed.

IV. STATUS OF AMENDMENTS

No amendment was filed subsequent to the Final rejection of May 4, 2005. However, filed concurrently with the present Appeal Brief is a paper requesting confirmation of consideration of the Information Disclosure Statements (IDSs) filed on May 2, 2003, and September 16, 2003.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention is directed to a multimedia information providing method and apparatus and a multimedia information reception apparatus that allows selecting information of a user's interest from a number of multimedia information, and providing the selected individual information to the user. (Specification at page 1, lines 10-16).

An information providing method of the present invention forms a program database by dividing multimedia information into plural partial information formed of a frame of frames, and respectively adds program feature data representing respective contents of the plural partial information to the plural partial information, to thereby respectfully store the plural partial with the added program feature data in the program database. (See for example program database 103 and Figure 3 in the present specification). (Which supports the "forming" of claim 1 and the "second database" of claim 3).

As a concrete example of such an operation, attention is directed to Figure 4 in the present specification. As shown for example in Figure 4, a program database is formed by dividing multimedia information into plural partial information formed of a frame or frames

and program feature data representing respective contents of the plural partial information is added to the plural partial information. Thereby, the plural partial information is stored with respective added program feature data, representing respective contents of the plural partial information, in the program database. In the non-limiting example shown in Figure 4 in the present specification, different plural partial information can have added thereto the keywords "Politics", "Economy", and "Weather Forecast" representing contents of the respective plural partial information.

Further, in the claimed invention the partial information can be searched to find particular information in accord with user profile data. Further, when a match is found between the user profile data and a program feature data, the searched partial information can be read out from the database and provided to a user. (See for example the present specification in Figure 5 and the disclosure at page 20, line 19 to page 21, line 14). (Which supports the "searching" and "reading out" of claim 1).

In an information providing apparatus according to the present invention, a first database 101 is configured to store multimedia information (which supports the "first database" of claim 3). An analyze section 102 is configured to analyze the multimedia information stored in the first database 101 using at least one analysis method of moving image analysis, acoustic/speech analysis, and text analysis. (See for example the present specification at page 12, line 5 to page 14, line 19). (Which supports the "analyze section" of claim 3 and in the preamble of claim 17).

Further, a second database 103 is configured to divide the multimedia information into plural partial information formed of a frame or frames, based on a result of the analysis by the analyze section 102, and to add program feature data representing respective contents of the plural partial information which is obtained from a result of analysis made by the analyze section 102 in units of the partial information or program feature data representing

respective contents of the plural partial information which is internally input into units of the partial information to the plural partial information to thereby store the plural partial information with the added program feature data. (See also for example Figure 4). (Which supports the "second database" of claim 3, and in "the preamble of claim 17).

Further, a search engine 105 is configured to search the program feature data from the second database 103 in accordance with user profile data to find program feature data which accords with the user profile, and to read the partial information from the first database 101 in accordance with the found searched program feature data. (See for example the present specification at page 106, lines 1-20 in Figure 5). (Which supports the "search engine" of claims 3 and 17).

Further, a link section 101 can be provided to obtain a representative image of the partial information and construct a display image including the representative image and searched program feature data. (Which supports the "link section" in claims 4 and 18).

Further, a third database 104 configured to store user profile data can be provided.

(See for example the present specification at page 14, line 20 to page 15, line 22, and Figs.

2A-2E). (Which supports the "third database" of claims 7, 13 and the "storing" in claim 19).

Further, a fourth database 108 to store commercial message data information and a fifth database 109 configured to store commercial feature data can be provided. (See for example Figure 11 in the present specification). (Which supports the "fourth database" of claim 8). With such additional databases, the search engine 105 can search for the commercial feature data from the fifth database 109 in accordance with the user profile data, and can search for the commercial message information corresponding to a searched commercial feature data from the fourth database 108.

According to a further feature, a link section (see link section 106 in Figure 1 in the present specification), can obtain a representative image of the partial information, and

construct a display image including the representative image and search program feature data. (See also Figure 8 in the present specification showing such a constructed display image and the discussion in the present specification at page 23, line 12 to page 24, line 2).

Further, commercial feature data can be added to commercial information to form a commercial database and a commercial information that accords with the user profile data can be provided to the user based on matching between the user profile data and the commercial feature data when providing the searched partial information to the user. That is, and with reference to Figure 1 in the present specification as a non-limiting example, CM data feature data from the CM feature database 109 can be added to commercial information to form a commercial CM database 108. (See also the discussion in the present specification at page 16, lines 1-15).

VI. <u>ISSUES TO BE REVIEWED ON APPEAL</u>

In the outstanding rejection, claims 1-25 stand rejected under 35 U.S.C. § 102(e) as anticipated by U.S. patent 6,061,056 to Menard et al. (herein "Menard"). Thereby, the only issue to be reviewed on appeal is whether the teachings in Menard meet the limitations of each of claims 1-25, without any modifications needed to the teachings in Menard.

VII. ARGUMENTS

<u>CLAIMS 1-25</u>

Applicants respectfully submit each of claims 1-25 clearly recites features neither taught nor suggested by Menard.

Specifically, independent claim 1 recites forming a program database by dividing multimedia information into plural partial information, and "respectively adding program feature data representing respective contents of the plural partial information to the plural

partial information to thereby respectively store the plural partial information with the added program feature data in the program database" (emphasis added). The other independent claims 3 and 17 recite a similar limitation as highlighted above. Applicants respectfully submit the outstanding rejection has not properly considered such a feature.

As discussed above, according to the claimed invention, a program database is formed by dividing multimedia information into plural partial information formed of a frame or frames, and program feature data representing respective contents of the plural partial information is added to the plural partial information. Thereby, the plural partial information is stored with respective added program feature data in the program database. As shown for example in Figure 4 in the present specification, different plural partial information can have added thereto the keywords "Politics", "Economy", and "Weather Forecast" representing contents of the respective plural partial information.

Further, in the claimed invention the partial information can be searched to find particular information in accord with user profile data. Further, when a match is found between the user profile data and the program feature data, the searched partial information can be read out from the database and provided to a user. Such features clearly distinguish over the teachings in Menard.

Menard does not teach or suggest that a program database is formed by dividing multimedia information into plural partial information formed of a frame or frames, and respectively adding program feature data representing respective contents of the plural partial information to the plural partial information to be stored with the plural partial information. Simply, the database of Menard does not store plural partial information with the added program feature data representing contents of the plural partial information. As a result, Menard does not further teach or suggest that partial information that accords with user profile data from the program database can be searched for based on a match between the

user profile data and the program feature data, and further that the searched partial information is read from the database to provide the search to partial information to a user.

Menard merely teaches a database for storing data representing criteria and storing, when a program data stream matches a stored data, a program segment and a program data stream (see Menard at col. 1, lines 66 to col. 2, line 18).

The basis for the outstanding rejection only references Menard at col. 1, lines 66 to col. 2, line 19 and col. 9, lines 1-20 to meet the above-noted limitations. However, at such sections, Menard merely provides broad teachings of the objectives therein and provides no details whatsoever even closely related to the above-noted claim features. It is unclear on what basis the outstanding rejection is even making a rejection based on the teachings in Menard.

Menard is directed to a system that can control which data from an input broadcast system is recorded. When a portion of an input broadcast system matches a stored criterion, the segment of the input broadcast system matching the stored criterion is stored.

However, such teachings in Menard are completely unrelated to the claimed features. In the claims not only is an input multimedia information stored, but program feature data representing respective contents of the plural partial information is *additionally stored* therewith.

A non-limiting example of such an operation in the present invention is shown for example in Figure 4 in the present specification. In Figure 4, assuming that the input multimedia information is a news broadcast, the analyzed section 102 analyzes that multimedia information news broadcast and divides it into plural partial information, in the example of Figure 4 noted by the different times. Then, for each divided portion, program feature data representing contents of each divided portion is added to the divided portion. For example, the section of the multimedia information at time 0:00-0:05 is analyzed as directed

to "Politics", and thereby the keyword "Politics" is added to that section and is stored with that section. Similarly, when the input news broadcast as the multimedia information is analyzed at the section at time 0:15-0:16 and is determined to be directed to the "Economy", the keyword "Economy" is added to that divided information section and stored therewith.

Menard does not teach or suggest any element of adding program feature data representing respective contents of the plural partial information and storing that program feature data with the plural partial information. The outstanding Office Action has not even addressed such a feature. Thereby, the outstanding rejections does not even set forth a *prima facie* case of anticipation to the claimed features.

In maintaining the outstanding rejection, the Final Office Action of May 4, 2005 on pages 3-4 states:

[Menard] teaches and describes automatic broadcast monitoring system that compares monitored broadcast signals with stored data representing program content of interest to user, and records segment of program when stored data matches program data, i.e. searching and comparing program data with stored data [based on] user interest (profile).

The system for monitoring standard broadcast signals receives broadcast signals, and includes a user selection unit for inputting criteria identifying program content of interest to the user. A database stores data representing the <u>program content criteria</u>, and a recognition device generates a program data stream representing the program content from the broadcast signals. A comparator <u>compares the program data</u> with the stored data, and an output device carries out predetermined action, e.g. recording a segment of the program, when the <u>program data matches</u> the stored data. The system can be configured to activate a window on a multimedia PC when preselected program material is present in the broadcast signals.

Thus, the system detects the content of broadcast signals of particular interest to individual viewers, e.g. monitoring world events for stock brokerage services, government organizations etc. and, the users can automatically be alerted as events occur. Therefore, the system enables automatic detection of content on TV broadcast using computers, synchronizing and capturing

incoming closed captioned text together with video and audio, and indexing and retrieval of individual sections of video and audio, based on content of e.g. closed caption text.

Therefore, the system of [Menard] teaches and describes a receiver device for automatically recording programs of user's interest using the information of an electronic program list send from broadcasting station.

Applicants clearly <u>still have failed</u> to explicitly identify specific claim limitations, which would define a patentable distinction over prior arts. [Original Emphasis].

The above-noted basis for the outstanding rejecting is traversed. Menard does not teach or suggest storing plural partial information with added program feature data that represents respective contents of the plural partial information. Menard merely teaches storing, when the received program data stream matches a stored data, a program segment and the program data associated therewith. However, applicants note that is not what the claims recite.

The claims recite initially dividing multimedia information into plural partial information formed of a frame or frames. Then, program feature data representing contents of the plural partial information is added to the plural partial information to be stored therewith. The segment of the program noted above as stored in <u>Menard</u> does not represent a respective content of plural partial information divided from multimedia information.

Further, if the Office Action relies upon those recorded segments of the program in Menard to correspond to the claimed "plural partial information", it is clearly the case that in Menard those recorded segments are not later searched in accord with a user profile data.

The outstanding Office Action also relies upon Menard disclosing a second database at col. 3, lines 27-65 and col. 6, lines 4-14. In that respect, Menard does state in col. 6, lines 9-11 that "[i]ndividual sections of video and audio can be retrieved using SQL-like queries on

¹ Menard at col. 1, line 66 to col. 2, line 18.

the closed caption text". However, such an operation in <u>Menard</u> does not at all correspond to the claimed searching for program feature data in accordance with user profile data to find a program feature data that accords with the user profile data.

In such ways, claims 1-25 as currently written clearly distinguish over Menard.

Further, applicants respectfully submit certain of the dependent claims recite features and further distinguishing over the applied art to <u>Menard</u>, as discussed below.

CLAIMS 2, 8, 15, AND 16

The above-noted dependent claims further recite adding or storing commercial message information that can also be provided to a user.

With respect to the above-noted features, the outstanding Final Office Action cites Menard at col. 3, lines 10-15.²

However, such teachings in <u>Menard</u> are completely unrelated to the claimed features. At col. 3, lines 10-15 <u>Menard</u> merely notes that marketing departments can collect information that can be used. Such teachings in <u>Menard</u> have no relation or even address whatsoever actually providing commercial information based on a user profile to a user. Thus, the above-noted claims further distinguish over Menard.

CLAIMS 4 AND 18

Claims 4 and 18 further recite a link section, such as link section 106 shown in the present specification, which obtains a representative image of the partial information and constructs a display image including a representative image on the search program feature data. That feature further distinguishes over Menard.

² Final rejection of May 4, 2005, page 9, lines 3-6.

Application No. 09/472,068 Appeal Brief

With respect to the above-noted features, the outstanding rejection cites Menard at col. 2, lines 47-65.³

However, such teachings in <u>Menard</u> have no relation whatsoever to the claimed features. <u>Menard</u> at col. 4, lines 47-65 indicates users are noted as being able to be automatically alerted to events. However, such notification in <u>Menard</u> does not provide a representative image of the partial information to a user. In claims 4 and 18, a user is provided a representative image, which is not addressed at col. 2, lines 47-65 in <u>Menard</u>.

VIII. CONCLUSION

In view of the foregoing comments, applicants respectfully submit each of claims 1-25 patentably distinguishes over the teachings in Menard. Therefore, the outstanding rejection must be REVERSED.

 $\begin{array}{c} \text{Customer Number} \\ 22850 \end{array}$

Tel: (703) 413-3000 Fax: (703) 413 -2220 (OSMMN 06/04) Respectfully submitted,

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.

Eckhard H. Kuesters Attorney of Record Registration No. 28,870 Surinder Sachar

Registration No. 34,423

I:\ATTY\SNS\0039\00397484\00397484-AB 2-24-06.DOC

³ Final rejection of May 4, 2005, page 9, lines 7-9.

CLAIMS APPENDIX

Claim 1 (Previously Presented): An information providing method comprising:

forming a program database by dividing multimedia information into plural partial information formed of a frame or frames, and respectively adding program feature data representing respective contents of the plural partial information to the plural partial information to thereby respectively store the plural partial information with the added

searching for the partial information which accords with user profile data from the program database based on matching between the user profile data and the program feature data; and

program feature data in the program database;

reading out the searched partial information from the database and providing the searched partial information to a user.

Claim 2 (Previously Presented): The method according to claim 22, further comprising:

adding commercial feature data to commercial information to form a commercial database; and

providing, to the user, commercial information which accords with the user profile data based on matching between the user profile data and the commercial feature data when providing said searched partial information to the user.

Claim 3 (Previously Presented): An information providing apparatus comprising: a first database configured to store multimedia information;

an analyze section configured to analyze said multimedia information stored in said first database using at least one analysis method of moving image analysis, acoustic/speech analysis, and text analysis;

a second database configured to divide the multimedia information into plural partial information formed of a frame or frames, based on a result of the analysis by the analyze section and to add program feature data representing respective contents of the plural partial information which is obtained from a result of analysis made by the analyze section in units of the partial information or program feature data representing respective contents of the plural partial information which is externally inputted in units of the partial information to the plural partial information to thereby store the plural partial information with the added program feature data; and

a search engine configured to search for program feature data from said second database in accordance with user profile data to find program feature data which accords with the user profile, and read the partial information from said first database in accordance with the found searched program feature data.

Claim 4 (Previously Presented): The apparatus according to claim 23, further comprising a link section configured to obtain a representative image of said partial information, and construct a display image including said representative image and searched program feature data.

Claim 5 (Original): The apparatus according to claim 3, wherein said user profile data includes information associated with the user's taste.

Claim 6 (Original): The apparatus according to claim 3, further comprising a keyboard configured to input said program feature data to said second database.

Claim 7 (Original): The apparatus according to claim 3, further comprising a third database configured to store said user profile data.

Claim 8 (Original): The apparatus according to claim 3, further comprising a fourth database configured to store commercial message information and a fifth database configured to store commercial feature data,

wherein said search engine searches for the commercial feature data from said fifth database in accordance with the user profile data, and searches for the commercial message information corresponding to a searched commercial feature data from said fourth database.

Claim 9 (Original): The apparatus according to claim 5, wherein the user profile data include information representing one of a producer, title, character, and genre of the multimedia information.

Claim 10 (Original): The apparatus according to claim 5, wherein said search engine searches for program feature data from said second database, and data which matches a thesaurus of the program feature data.

Claim 11 (Original): The apparatus according to claim 3, further comprising a history recording section configured to record a viewing history data of a user.

Claim 12 (Original): The apparatus according to claim 11, wherein said viewing history data represents a user, start and end time of watch, and program feature data of information watched by the user.

Claim 13 (Original): The apparatus according to claim 11, further comprising: a third database configured to store said user profile data; and a rewrite section configured to rewrite the user profile data stored in said third database in accordance with said viewing history data.

Claim 14 (Original): The apparatus according to claim 3, further comprising a display section configured to display the partial information selected by said search engine.

Claim 15 (Original): The apparatus according to claim 8, further comprising a display section configured to display the partial information selected by said search engine and display the commercial message information selected by said search engine as a banner.

Claim 16 (Original): The apparatus according to claim 8, further comprising a display section configured to display the partial information selected by said search engine and display the commercial message information selected by said search engine as a subwindow.

Claim 17 (Previously Presented): An information reception apparatus connected to an information providing server having an analyze section configured to analyze multimedia information using at least one analysis method of moving image analysis, acoustic/speech analysis, and text analysis, a database which divides multimedia information into partial information formed of a frame or frames based on a result of analysis by the analyze section,

each partial information including representative images of a respective multimedia information, adds either (1) program feature data representing respective contents of the plural partial information which is obtained from a result of analysis made by the analysis section in units of the partial information or (2) program feature data representing respective contents of the plural partial information which is externally input in units of the partial information to the reby store the partial information with the added program feature data the apparatus comprising:

a search engine configured to search for predetermined program feature data which accords with user profile data from said database and read the partial information from said database in accordance with searched program feature data.

Claim 18 (Previously Presented): The apparatus according to claim 24, further comprising:

a link section configured to obtain a representative image of said partial information, and construct a display image including said representative image and the searched program feature data.

Claim 19 (Previously Presented): An information describing method according to claim 1, further comprising:

storing the user profile data; and

updating the user profile data based on a result of a search by adding an item of information corresponding to the searched partial information to the user profile data.

Claim 20 (Previously Presented): The information describing method according to claim 25, wherein said group of information items including data indicating personal profile of the user.

Claim 21 (Original): The information describing method according to claim 19, wherein said group of information items including data indicating taste of the user.

Claim 22 (Previously Presented): The method according to claim 1, wherein each plural partial information includes representative images of a respective multimedia information.

Claim 23 (Previously Presented): The apparatus according to claim 3, wherein each plural partial information includes representative images of a respective multimedia information.

Claim 24 (Previously Presented): The apparatus according to claim 17, wherein each plural partial information includes representative images of a respective multimedia information.

Claim 25 (Previously Presented): The method according to claim 19, wherein each plural partial information includes representative images of a respective multimedia information.

EVIDENCE APPENDIX

None

RELATED PROCEEDINGS APPENDIX

None.